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**KS4 Cross-curricular Teaching Resources**

**About Rescue Wooden Boats**

Boat builders and craftsmen David Hewitt and George Hewitt, together with wooden working boat enthusiasts launched a charitable trust called Rescue Wooden Boats in 2011.

Its aims are to:

* Restore examples of wooden working boats back to use on the water,
* Tell their stories through film and photographs,
* Conserve the crafts and skills involved in building and using them, as

well as to

* Encourage young people to become actively involved in understanding

their maritime heritage.

Rescue Wooden Boats has been given ***Dunkirk veteran*** [***Lucy Lavers***](http://www.rescuewoodenboats.com/Lucy_lavers) a Liverpool single screw lifeboat, built in 1940, by the *[Dunkirk Little Ships Restoration Trust](http://www.dlsrt.org.uk/" \t "_blank" \o "Dunkirk Little Ships Restoration Trust)*. Their first project is to restore her with the help of a Heritage Lottery Grant and to return her by sea to Dunkirk for the 75th anniversary in 2015. After this she will give trips afloat in Wells-next-the-Sea.

They have set up a ***Visitor and Education Centre in Stiffkey***, North Norfolk, which is housed in part of the old artillery training military camp, and tells the story of *Lucy Lavers* and working fishing boats and boatbuilding through displays, films and artefacts. Visitors can also see the working boat yard next door where the restoration works is taking place.

Rescue Wooden Boats is filming the restoration work as well stories from fishermen and life boatmen and of the boats themselves. There are over ***100 short films*** on their website.

Rescue Wooden Boats also has a number of ***fishing boats, whelkers and crab boats*** which are waiting to be restored and returned to being used afloat.

**Rescue Wooden Boats**

**KS4 Cross-curricular Teaching Resources**

**Lesson summary**

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| --- | --- | --- |
| **Activity** | **Curriculum links** | **Activity** |
| 1. The Lucy Lavers | All | Students watch video ‘Lucy Lavers – introduction’ and complete worksheet to provide overview of the project. |
| 1. Little Ships | History, Computing, Geography, English (Reading, Writing, Spoken English) | Introduce students to Dunkirk and the role of the Little Ships using PowerPoint and British Pathé film. Students use maps to draw the route taken by the little ships. Students evaluate evidence to decide whether the evacuation of Dunkirk was a triumph or a disaster. Students write an account of Operation Dynamo from the perspective of a Little Ship, a crew member or a rescued soldier. Students role play Operation Dynamo, or undertake hotseating activity. |
| 1. Turntables | Design and technology | Students watch video ‘Abdy Beauclerk and Lucy Lavers’ to hear description (at 4 mins) of how ramps, weights, chains, pulleys and turntables were used to launch the lifeboat and bring it back to the lifeboat house. Students design and test their own turntable for turning a boat. |

**Using these resources**

These lesson plans can be used individually within your own longer scheme

of work, or as part of cross-curricular themed days/weeks. The resources can be used as provided, or they can be adapted to meet the needs of your own class/es.

**Visiting the Education Centre and getting involved**

These resources can be used by teachers to help them to prepare students for a visit to the Rescue Wooden Boats Education Centre. They can also be used to help students to understand the restoration project before the Dunkirk 75th anniversary commemoration in 2015, as well as after Lucy Lavers has returned from her 75th anniversary trip to Dunkirk in May 2015.

**RWB videos**

The Rescue Wooden Boats website (rescuewoodenboats.com) features a vast library of short films (in vimeo format) that can be shared with classes. Some of the lesson plans refer to specific films (identified as ‘RWB video’). These can all be accessed from the Films page of the Rescue Wooden Boats website, under the sub-heading ‘Lucy Lavers’.

**Abbreviations:**

BA = Below average (activity for pupils needing extra support)

A = Average (core activity)

AA = Above average (activity for most able pupils)

RS = Resource Sheet

**Rescue Wooden Boats Key stage 4 lesson resource**

|  |  |  |
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| 1. **The Lucy Lavers** | | |
| **National Curriculum criteria/cross-curricular links**  All | | |
| **Lesson objectives**  To find out about the Lucy Lavers and plans for her restoration. | | |
| **Lesson plan**  Show students theRWB video ‘Lucy Lavers – introduction’.  Students complete worksheet to provide overview of the project (RS1).  Go through answers with students (RS1a) and discuss the restoration project – do students think it is worthwhile? Are they surprised by how long it will take? Should we try to keep old skills like boatbuilding going? | | |
| **Lesson outcome**  Students understand what the Lucy Lavers is, some information about her history and structure and an overview of the plans for her future.  **Success criteria** | | |
| **AA**  Most questions answered correctly. Useful and well-considered contribution made during class discussion. | **A**  Most questions answered correctly. Contribution made during class discussion. | **BA**  Some questions answered correctly. Limited contribution made during class discussion. |
| **Resources**  RS1 The Lucy Lavers worksheet  RS1a The Lucy Lavers - answers | | |
| **Health and safety**  N/A | | |

**Rescue Wooden Boats Key stage 4 lesson resource**

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| --- | --- | --- |
| 1. **Little Ships** | | |
| **National Curriculum criteria/cross-curricular links**  History  Computing  Geography  English (Reading, Writing, Spoken English) | | |
| **Lesson objectives**  To identify places on a map. To write an account of the Little Ships rescue from a defined perspective, with illustrations. To role play a character from Operation Dynamo. | | |
| **Lesson plan**  Use PowerPoint presentation to introduce children to Dunkirk and the role of the little ships (RS4 KS3 PowerPoints). Show British Pathé film of Dunkirk, provide other sources for children to read (See RS4a Teachers notes for suggested resources).  Students use the Internet to find out why the Little Ships were needed and what their role was. Students use maps to draw the route taken by the Little Ships.  Students evaluate evidence to decide whether the evacuation of Dunkirk was a triumph or a disaster (use slide 7 to encourage students to write both sides of argument).  Students write an account of Operation Dynamo from the perspective of a Little Ship, a crew member or a rescued soldier (RS4 KS3 PowerPoint, slide 8, RS4b and RS4c).  Students role play Operation Dynamo, or undertake hotseating activity where different students play different characters (e.g. soldier being rescued, politician, crew member), see RS4a. | | |
| **Lesson outcome**  Students identify Dunkirk and the route of the Little Ships on a map. Students write an account of the Little Ships rescue from a chosen perspective, with illustrations. Students role play a character from the rescue.  **Success criteria** | | |
| **AA**  Comprehensive evaluation of Dunkirk considering both sides of triumph vs disaster argument. Detailed memoir from chosen perspective that shows empathy. Active part of role play. | **A**  Evaluation of Dunkirk considering both sides of triumph vs disaster argument. Memoir from chosen perspective that shows empathy. Takes part in role play. | **BA**  An evaluation of Dunkirk that attempts to consider both sides of triumph vs disaster argument. Brief memoir from chosen perspective, using RS4c. Limited participation in role play. |
| **Resources**  RS4 PowerPoint and RS4a Teachers’ notes  Maps of English channel showing Ramsgate and Dunkirk  RS4b Little ships memoir  RS4c Little ships memoir (with writing frame)  Colouring materials, Internet access | | |
| **Health and safety**  Refer to school Internet access policy as applicable | | |

**Rescue Wooden Boats Key stage 4 lesson resource**

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| **3. Turntables** | | |
| **National Curriculum criteria/cross-curricular links**  Design and technology | | |
| **Lesson objectives**  To design and test a turntable for moving a heavy object. | | |
| **Lesson plan**  Students watch RWB video ‘Abdy Beauclerk and Lucy Lavers’ to hear description (at 4 mins) of how ramps, weights, chains, pulleys and turntables were used to launch the lifeboat and bring it back to the lifeboat house. Discuss the video with the class and introduce the task. Refer to modern day usage of turntables for lifeboats http://rnli.org/lifeboat-building/the-shannon/Pages/the-shannon-tabs/features-and-upgrades-vertical-tabs/launch-and-recovery.aspx#.UxH8grdFCRs  Students work in pairs or small groups to design and test a turntable for moving a heavy item.  Students compare their turntable with those of others and evaluate their design.  Students produce a turntable design for a lifeboat station, based on their own design. | | |
| **Lesson outcome**  Produce and evaluate a turntable and use this to design a lifeboat turntable.  **Success criteria** | | |
| **AA**  Design test and evaluate a turntable. Fully consider the features of the turntable and use this information to propose a design for a lifeboat turntable. Provide a full description of the turntable design. | **A**  Design test and evaluate a turntable. Consider the features of the turntable and use this information to propose a design for a lifeboat turntable. Provide a description of the turntable design. | **BA**  With support, design test and evaluate a turntable. Begin to consider some of the features of the turntable and use this information to propose a design for a lifeboat turntable. Provide a (limited) description of the turntable design. |
| **Resources**  RS3 Turntable evaluation  RS3a Lifeboat turntable design  RS3b Teachers’ notes  Materials for constructing turntable. | | |
| **Health and safety**  Depends on machinery and equipment that will be used. Risk assessment may be necessary. | | |

RS1: The Lucy Lavers (page 1 of 2) NAME……………………………………………………………

**The Lucy Lavers**

Answer these questions as you watch the video.

1. What kind of lifeboat is the Lucy Lavers?
2. How long is she?
3. What feature makes her unique?
4. Why was she stripped out?
5. What is she made of?
6. What are the bronze ports for?
7. What are the handrails for?
8. Which part of the Lucy Lavers is in good condition?
9. There are bits missing from the rudder – how will it be replaced?

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1. What is the propeller tunnel for?

RS1: The Lucy Lavers (page 2 of 2) NAME……………………………………………………………

1. Why are there holes on the boat?
2. Why is a turntable needed?
3. Where is most work needed and what needs to be done?
4. What shape is the engine canopy?

1. How many hours will it take to restore the Lucy Lavers?

RS1a: The Lucy Lavers (page 1 of 2)

**The Lucy Lavers – answers to worksheet**

1. What kind of lifeboat is the Lucy Lavers?

*Single screw Liverpool lifeboat*

1. How long is she?

*35’6”*

1. What feature makes her unique?

*Distinctive roller*

1. Why was she stripped out?

*To complete another boat*

1. What is she made of?

*Mahogany and calico*

1. What are the bronze ports for?

*To drain the deck*

1. What are the handrails for?

*Survivors to hold on to*

1. Which part of the Lucy Lavers is in good condition?

*The hull*

1. There are bits missing from the rudder – how will it be replaced?

*Cast or fabricate one or try to source one from another boat*

RS1a: The Lucy Lavers (page 2 of 2)

1. What is the propeller tunnel for?

*To protect the propeller on the beach*

1. Why are there holes on the boat?

*To pull it out of the water and onto the carriage*

1. Why is a turntable needed?

*To turn the boat stern first onto the carriage*

1. Where is most work needed and what needs to be done?

*Inside – bulkheads and deckbeams need to be replaced, remove and check centreboard case*

1. What shape is the engine canopy?

*Double diagonal turtleback*

1. How many hours will it take to restore the Lucy Lavers?

*1000 – 1500hours*

RS2a Little Ships

**Little Ships – teachers’ notes**

The following resources may be useful to help students to understand the Little Ships evacuation of soldiers from the beaches of Dunkirk:

**Dunkirk photos:**

http://1940.iwm.org.uk

(click on Dunkirk. Look on menu at right hand side – no.5 also has additional photos)

http://gallery.nen.gov.uk/gallery13587-.html

http://en.wikipedia.org/wiki/Little\_ships\_of\_Dunkirk

http://en.wikipedia.org/wiki/Evacuation\_of\_Dunkirk

**Film:**

http://www.britishpathe.com

Time to remember – Run Rabbit Run (1940) reel 4

video newsreel

<http://www.historylearningsite.co.uk/dunkirk.htm>

http://www.adls.org.uk

http://en.wikipedia.org/wiki/Little\_ships\_of\_Dunkirk

http://www.guardian.co.uk/world/2010/may/27/operationdynamo-dunkirk-little-ships

Eric Woodroffe’s recount: http://www.warexperience.org/history/keyaspects/dunkirk/default.asp

Ted Stonard’s memoir: http://www.britishpathe.com

‘A Little Ship goes back’

**How to access the British Pathé site from your school premises:**

You should be able to download footage for education purposes. You will be able to see a smaller clip version at home but there will be a ‘Buy this Clip icon’ instead of just a download button. If you are unable to access a full screen version at school, contact British Pathé, following the instructions on their site.

**Role play and hotseating activities**

A simple role play activity can be used to encourage the students to imagine what it would have been like to be part of Operation Dynamo. Small groups could be divided into crew members travelling to the beaches and soldiers waiting to be rescued on the beaches.

Alternatively, a hotseating activity could be organised, with students taking on the roles of key players in Operation Dynamo – crew members, rescued soldier, politician. The students explain their involvement and whether they think the rescue is a triumph or a disaster.

RS2b: Little ships

**Little Ships memoir**

You are going to write about the Little Ships rescue. You can choose to be one of the following authors:

* a Little Ship,
* a crew member,
* a rescued soldier

Think about what you would be feeling – scared, excited, nervous? What happened before you became involved in Operation Dynamo? What will life be like after the rescue? What do you think about the war?

Draw a picture showing your character during the rescue.

You are going to write about the Little Ships rescue. You can choose to be one of the following authors:

* a Little Ship,
* a crew member,
* a rescued soldier

Think about what you would be feeling – scared, excited, nervous? What happened before you became involved in Operation Dynamo? What will life be like after the rescue? What do you think about the war?

Draw a picture showing your character during the rescue.

RS2c: Little ships NAME……………………………………………………………

**Little Ships memoir**

You are going to write about the Little Ships rescue. You can choose to be one of these characters:

* a Little Ship,
* a crew member,
* a rescued soldier.

You will write about your feelings and what your role is in the Little Ships rescue.

My name is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and I am a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ . I have travelled from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ . I am feeling \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Before the Little Ships rescue I was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Now I am \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

I think the war is necessary / unnecessary. This is because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Now draw a picture showing your character during the rescue.

RS3a Turntables (Page 7 of 7) NAME……………………………………………………

**Turntable evaluation**

Use this sheet to evaluate your turntable design.

1. What features of the turntable worked well? Why?

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1. What features of the turntable didn’t work well. Why?

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1. How would you improve the turntable if you were to build one again?

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RS3a Turntables NAME……………………………………………………

**Lifeboat station turntable**

Turntables are used to turn lifeboats when they return to the lifeboat station from the sea. Using evidence from the one that you’ve made, design a turntable for a lifeboat station. Include a diagram and a description of materials and measurements that will be needed when building the turntable.

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RS3b Turntables

**Turntables – teachers’ notes**

The turntables project has been left very open, as the type of turntable designed and built by the students will be dependent on the time available and the equipment and materials provided in your classroom.

Simple models can be constructed first from paper and card, before the students complete their final product using more sturdy materials (plastics, wood etc.). Students can be encouraged to investigate the impact of using different materials, or different sizes of turntable on the mass that can be carried. Students will also need to consider the impact of friction on the smooth operation of the turntable and how this will slow down or speed up the turntable (important considerations for a busy lifeboat).